Zsh Shell with power globbing

CONCEPTS

> Zsh does not word-split unquoted $var, and a glob pattern that matches nothing is an error unless you add (N).

History !! and !$
↓ alias
Aliases global and suffix too
↓ expand
Expansion ${...}, $(...), globs
↓ run
Command status in $?

> Startup files: .zshenv always, .zprofile for login, .zshrc for interactive. Put aliases and prompt in .zshrc.

> Array indices start at 1, not 0, unless KSH_ARRAYS is set.

GLOBBING

`ls **/*.<ext>`
Match files in all subdirectories

`ls *(/)`
Directories only

`ls *(.)`
Regular files only

`ls *(om[1,5])`
Five most recently modified

`ls *(Lm+10)`
Files larger than 10 MB

`ls *(mh-1)`
Modified in the last hour

`ls *(.N)`
Match or give nothing, no error

`ls ^*.log`
Everything except .log files

`ls *.(jpg|png)`
Alternation in a pattern

PARAMETER EXPANSION

`${var:-<default>}`
Use default if unset or empty

`${var:u}`
Uppercase

`${var:t}`
Tail: file name of a path

`${var:h}`
Head: directory of a path

PARAMETER EXPANSION (cont.)

`${var:r}`
Strip the extension

`${var/<old>/<new>}`
Replace first match

`${var//<old>/<new>}`
Replace all matches

`${(s:,:)var}`
Split on commas into an array

ARRAYS & MAPS

`arr=(a b c)`
Create an array

`$arr[1]`
First element

`$arr[-1]`
Last element

`arr+=(<item>)`
Append an element

`typeset -A <map>`
Declare an associative array

`typeset -U path`
Keep PATH entries unique

`path=(~/bin $path)`
Prepend to PATH

HISTORY

`!!`
Repeat the previous command

`sudo !!`
Rerun the last command as root

`!$`
Last word of previous command

`history`
List commands with numbers

`Ctrl+R`
Search history backwards

`Alt+.`
Insert last argument of previous

`setopt share_history`
Share history between sessions

OPTIONS

`setopt <option>`
Turn an option on

`unsetopt <option>`
Turn an option off

OPTIONS (cont.)

`setopt extended_glob`
Enable ^, ~ and # patterns

`HISTSIZE=<n> SAVEHIST=<n>`
Memory and file history sizes

PROMPT, ALIASES & COMPLETION

`PROMPT='%n@%m %~ %# '`
Set the prompt

`alias <name>='<cmd>'`
Define an alias

`autoload -Uz compinit && compinit`
Enable the completion system

`zstyle ':completion:*' menu select`
Arrow-key completion menu

`Tab Tab`
Show or cycle completions

`source ~/.zshrc`
Reload the config file

DIRECTORIES & FUNCTIONS

`<name>() { ... }`
Define a function

DIFFERENCES FROM BASH

Behaviour changes

Topic	Bash	Zsh
Unquoted $var	word-split	not split
Array start	index 0	index 1
No glob match	passes pattern	error
Prompt read	read -p	read '?txt '
Config file	~/.bashrc	~/.zshrc
Ignore case	nocasematch	(#i)

`read -r '?Name: ' <var>`
Prompt text with read

RECIPES

Starter ~/.zshrc

```
autoload -Uz compinit && compinit
setopt auto_cd share_history
HISTFILE=~/.zsh_history
SAVEHIST=50000
typeset -U path; path=(~/bin
$path)
```

Delete old logs, dry run first

```
ls -l **/*.log(.Lm+10mw+4)
# review the list, then
rm -- **/*.log(.Lm+10mw+4)
```